

General Electric



Policies for Smart Grid Acceleration

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Requirements Of A Smarter Grid

Traditional Power System Requirements:

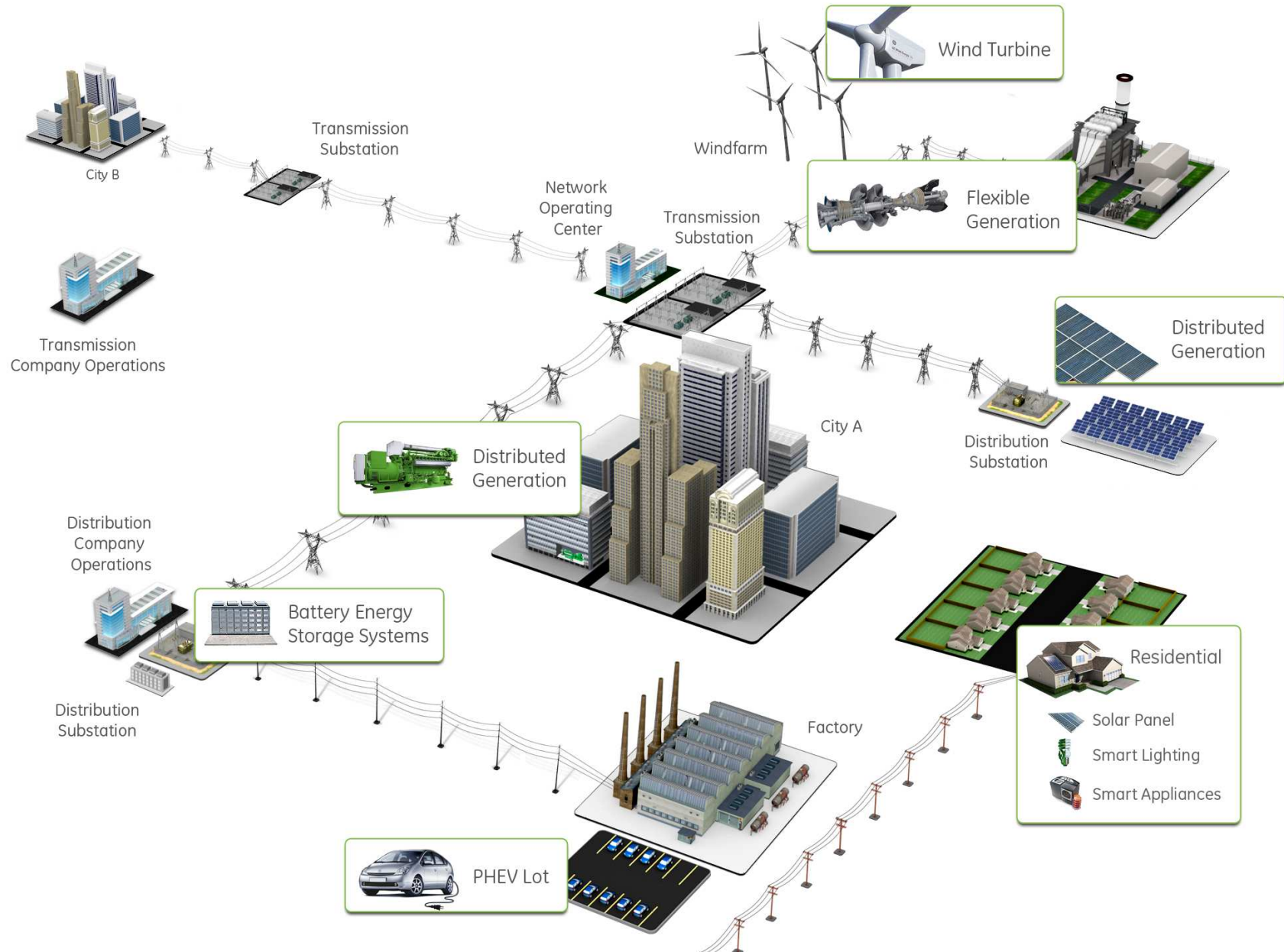
- Reliable
- Safe
- Good Power Quality
- Cost effective

Smarter Grid Requirements:

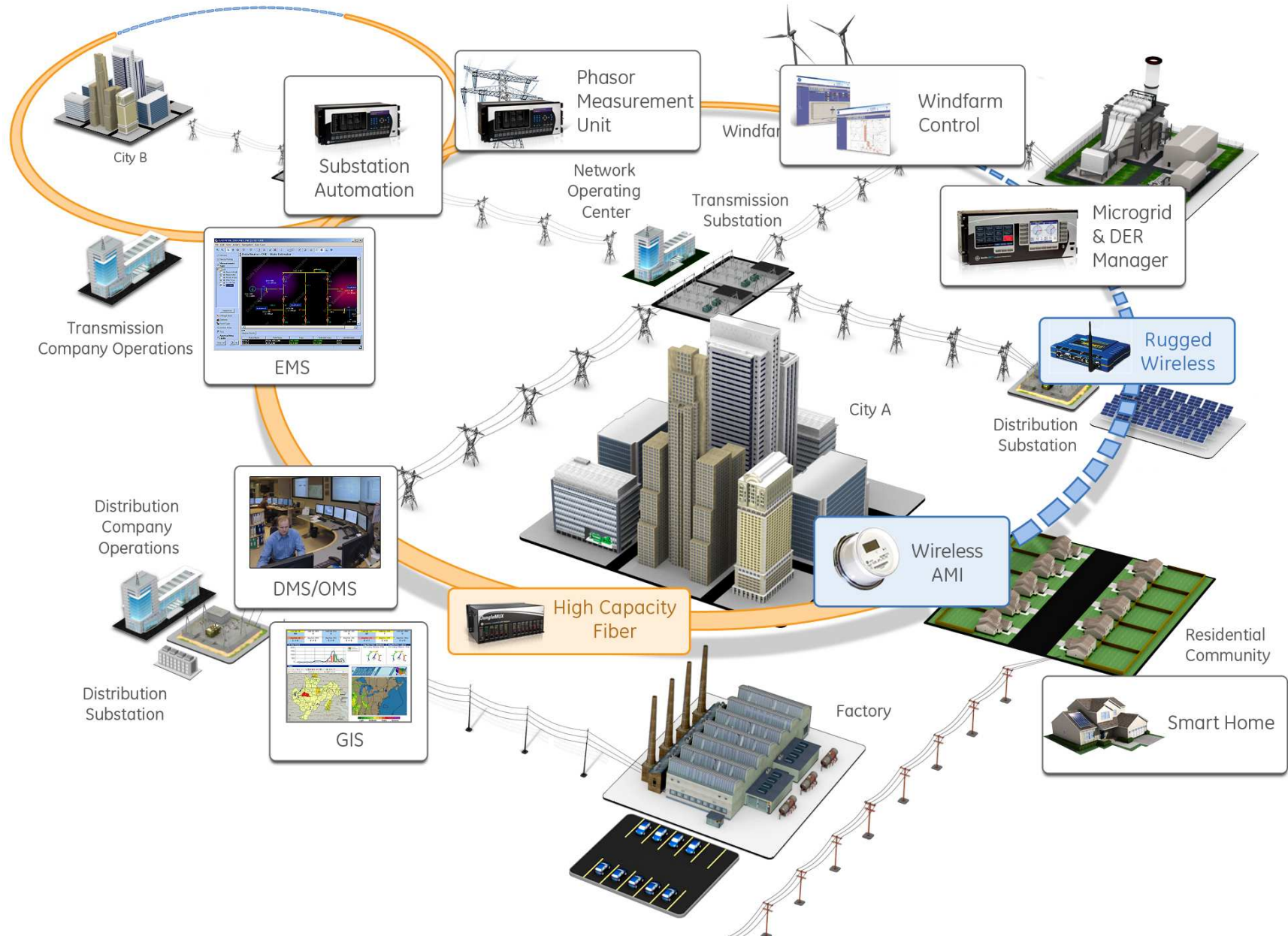
- More productive (Better utilization of infrastructure assets)
- More efficient (Efficient loads, and efficient delivery of power)
- Cleaner (Use of cleaner and renewable energy resources)
- Interactive (Consumers participate in balancing supply/demand)
- Self-healing (Automatic reconfiguration to prevent cascading outages)

**Achieved Through a Controls and Communications
Overlay of the Grid**

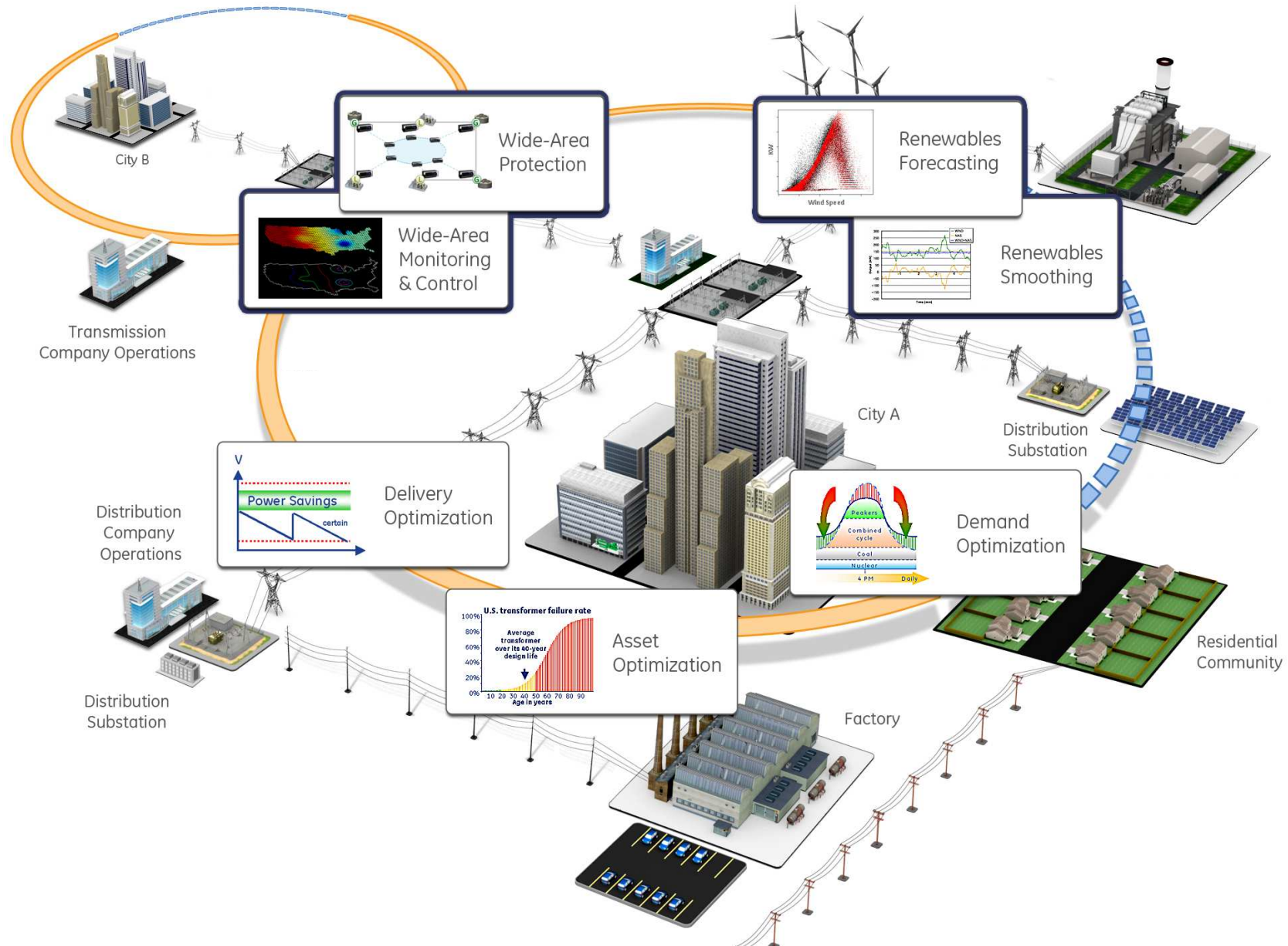
The Grid Is Becoming More Complex



First Step: Build A Capable Backbone...



That Can Support Evolving Capabilities...



Smart Grid Policy At Work

American Recovery & Reinvestment Act of 2009



Measure	ARRA	Agency
Modernization of the nation's electricity grid	\$4.5 B	DOE
Electricity transmission systems investment	\$6.5 B	WAPA & BPA
Extend broadband internet	\$7.2 B	NTIA and/or USDA
Loan guarantees for renewable energy systems & electric transmission projects	\$6.0 B	DOE

Additional Policy Accelerants

Federal

- Carbon policy
- Federal RPS (RES)
- Accelerated depreciation
- Standards

State

- Smart Grid and efficiency policies
- Net metering
- Dynamic pricing



Our position ... focus on the benefits, not just the infrastructure

- > Transform today's grid to realize benefits NOW
- > Ensure full societal benefits for our economy, environment and energy security
- > Focus funding on totality of the solution
- > Focus on large-scale deployments
- > Software solutions alongside infrastructure improvements are critical to delivering the promise of the smart grid

